GOVERNMENT OF INDIA
ENVIRONMENT, FORESTS AND CLIMATE CHANGE
LOK SABHA

UNSTARRED QUESTION NO:2678
ANSWERED ON:10.05.2016
Use of Refrigerants
Rai Shri Prem Das

Will the Minister of ENVIRONMENT, FORESTS AND CLIMATE CHANGE be pleased to state:

(a) whether natural compounds like ammonia and propane are being used as refrigerants in Europe and other countries and if so, the details thereof;
(b) whether India is in the process of talks with other countries for phasing out of Hydro Fluoro Carbons (HFCs) as refrigerants and if so, the details thereof;
(c) the details of the alternatives available for Hydro Fluoro Carbons(HFCs) likely to be used;
(d) whether the Government will incentivise use of natural refrigerants instead of proprietary chemicals; and
(e) if so, the details thereof and if not, the reasons therefor?

Answer

MINISTER OF STATE (INDEPENDENT CHARGE) FOR ENVIRONMENT, FOREST AND CLIMATE CHANGE

(SHRI PRAKASH JAVADEKAR)

(a) Yes, Sir. Natural refrigerants like ammonia, propane and carbondioxide, due to their thermodynamic properties, are used in large air-conditioning systems such as supermarkets, convenience stores, Heating, Ventilation and Air-Conditioning (HVAC) and commercial refrigeration, etc., in Europe and other countries. Propane in small quantities is used in almost all the domestic refrigerators and its use has begun in small capacity air-conditioners.

(b) Recognizing the growing use of HFCs as replacement of Chloroflourocarbons (CFC) and Hydrochloroflourocarbons (HCFC), some of the Parties to the Montreal Protocol have been submitting proposals for amendment to the Montreal Protocol for phase down of Hydroflourocarbons (HFC). India has also submitted a proposal for amendment to the Montreal Protocol for phase-down of HFCs in April 2015.

(c) Some low-GWP (Global Warming Potential) alternatives namely Hydrofluoroolefins (HFOs), blends of HFOs and HFCs, and natural refrigerants are the likely substitutes.

(d) The choice and evolution of techno economically viable and proven alternatives is best decided by the market.

(e) In India the natural refrigerants are in use in industrial and agricultural sector (cold storages). The household refrigeration system is mostly on natural refrigerants. Recently its use has begun in foam sector and small room air conditioning. As the proven technology and economically viable alternatives are not available in all the sectors like Mobile Air Conditioning and large room air conditioning, the use of synthetic refrigerants will continue till tested and proven alternatives emerge in the market.
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